

IN THE CLAIMS:

1-5. (canceled)

6. (Currently amended) An oil pump comprising:

a pump body having a hollow recess in a side face thereof;

a pump cover having an inner side face closing the hollow recess in the pump body thereby forming a gear compartment;

a drive gear driven by a drive shaft and rotatably supported in the gear compartment;

a rotatable driven gear rotatably supported in the gear compartment in mesh with the drive gear and driven by the drive gear;

a pump body discharge port formed in the pump body and a pump cover discharge port formed in the pump cover, the discharge ports defining, within the gear compartment, a discharge area for working spaces formed by the engagement of teeth of the drive gear with teeth of the driven gear;

a pump body suction port formed in the pump body and a pump cover suction port formed in the pump cover, the suction ports defining, within the gear compartment, a suction area for the working spaces;

a pump body notch formed in the pump body and extending circumferentially from the front end of the pump body discharge port, in a direction reverse to rotation, toward to the rear end of the pump body suction port ~~discharge area~~; and

a pump cover notch formed in the pump cover and extending from the front end of the pump cover discharge port, in the direction reverse to rotation, toward to the rear end of the pump cover suction port ~~discharge area~~;

wherein one of the pump body and the pump cover is formed of cast iron and the other is formed of a light alloy;

~~wherein the length of the notch formed in the pump body or the pump cover formed of the light alloy is longer than that of the notch formed in the pump body or the pump cover comprising the cast iron; and~~

wherein bubbles generated within the oil in the working spaces during high-speed rotation of the drive gear are reduced by the high-pressure working oil flowing back into the working spaces through the longer notch in the light alloy pump body or the pump cover formed of cast iron;

wherein the notch formed in the light alloy has (1) an approximately triangular shape and a width decreasing from the front end of the discharge port in the light alloy, in the direction reverse to rotation, toward the rear end of the suction port in the light alloy and (2) an inclined bottom so that its depth decreases from the front end of the discharge port in the light alloy, in the direction reverse to rotation, toward the rear end of the suction port in the light alloy; and

wherein, upon rotation of the gears, a working space first communicates with the discharge area through the notch in the light alloy alone, then, upon further rotation, communicates with the discharge area through both the notch in the light alloy and the notch in the cast iron and then, upon yet further rotation, comes into direct communication with the pump body discharge port and the pump cover discharge port.

7. (Original) The oil pump according to Claim 6, wherein

the driven gear is a rotatable internal gear having its outer circumference supported by the inner circumferential surface of the gear compartment;

the drive gear is an external gear meshing with the driven gear;

the discharge port in the pump body and the discharge port in the pump cover

are each arc-shaped; and

the notch in the pump body and the notch in the pump cover extend circumferentially from the front ends of the discharge port in the pump body and the discharge port in the pump cover, respectively, to the rear end of the discharge area.

8-9. (Canceled)

10. (Original) An automatic transmission having a supply source of hydraulic pressure, wherein

the supply source of the hydraulic pressure is the oil pump according to Claim 6; and

the pump body or the pump cover formed of the light alloy is integrated with a housing of the automatic transmission.

11-13. (Canceled)

14. (New) The oil pump according to Claim 6, wherein the length of the notch formed in the cast iron is approximately one-quarter to one-half the length of the notch formed in the light alloy.

15. (New) The oil pump according to Claim 14, wherein the pump cover is formed of the light alloy.

16. (New) The oil pump according to Claim 15, wherein the light alloy is an aluminum alloy.

17. (New) The oil pump according to Claim 6, wherein the pump cover is formed of the light alloy.

16. (New) The oil pump according to Claim 17, wherein the light alloy is an aluminum alloy.